

# natural lakes and marshes

## **Characteristics**

The majority of Iowa's natural lakes were formed by glaciers that covered lowa until about 14,000 years ago. They tend to be shallow and warm. Some have rocky shores of glacial boulders. Spirit Lake and the Okoboji chain-of-lakes in Dickinson County are of greater depth and size. Their watersheds tend to be relatively flat land with bands of hills from soils deposited by glaciers (moraines) and shallow valleys. These lakes generally have good water quality, but this can decline rapidly as a result of shoreline development or loss of soil and nutrients from unprotected land in the watershed. Many of the more shallow lakes and prairie "potholes" have been drained and/or filled in for agricultural purposes, but about 50 lakes with a combined surface area of about 32,000 acres remain.

Some of our marshes are older lakes which have filled in with sediments and organic debris. They are characterized by shallow water with many herbaceous plants (cattails, rushes, sedges, grasses). They have standing water for prolonged periods during the growing season. Trees and shrubs may be present along the edge. Fewer than 27,000 acres of lowa's original six million acres of prairie wetlands remained in 1990. Several federal and state programs targeted at restoring wetlands have since added about 5,000 acres of wetlands.

### Recreation

Boating, canoeing, fishing, hiking, hunting, swimming, trapping, wildlife observation and/or photography

### What Lives Here?

Natural lakes and marshes are highly productive. They include a variety of plant life, microscopic invertebrates, insects, fishes, amphibians, reptiles, birds, and mammals. They also are important to migrating species of birds as resting and feeding areas.

Organisms found in this CD:

American bittern, American coot, American toad, American white pelican, American wigeon, anabaena, aquatic sowbug, backswimmer, banded killifish, belted kingfisher, beaver, blue-winged teal, big brown bat, bigmouth buffalo, bigmouth shiner, black bullhead, black crappie, blackcrowned night-heron, black willow, bladderwort, Blanding's turtle, bluegill, blue flag iris, blue skullcap, bluntnose minnow, boneset, broadleaf arrowhead, brook stickleback. bullfrog, bullhead minnow, bulrush, buttonbush, caddisfly, Canada goose, cardinal flower, cattle egret, central mudminnow, channel catfish, chara, chlorella, clearweed, common carp, common cattail, common shiner, common yellowthroat, coontail, Cope's gray treefrog, copepod, cottonwood, crane fly, crawling water beetle, cricket frog, curlyleaf pondweed, damselfly, deer fly, devil crayfish, diatoms, double-crested cormorant, dragonfly, duckweeds, earthworm, euglena, Eurasian watermilfoil, false nettle, fathead minnow, fatmucket, fingernailclams and peaclams, fisher spider, freshwater drum, freshwater sponge, fog fruit, giant floater, giant water bug, golden shiner, Graham's crayfish snake, gray treefrog, great blue lobelia, great blue heron, great plains toad, greater yellowlegs, green frog, green heron, green sunfish, hooded merganser, hornyhead chub, horse fly, horsetail, hydra, Johnny darter, killdeer, largemouth bass, leafy pondweed, least shrew, least weasel, leech, left-handed snails, long-tailed weasel, mallard, marsh wren, massasauga, mayfly, meadow jumping mouse, microcystis, midge, mink, mosquito, muskellunge, muskrat, northern harrier, northern leopard frog, northern pike, northern rock bass, northern shoveler, northern water snake, Norway rat, operculate snails, orangespotted sunfish, pied-billed grebe, plains garter snake, plains leopard frog, planaria, prairie cord grass, predaceous diving beetle, prothonotary warbler, protozoa, pumpkinseed, purple ammannia, quillback, raccoon, redeared turtle, red-sided and eastern garter snakes, red shiner, red-winged blackbird, right-handed snails, ring-billed bull, river otter, rusty crayfish, sago pondweed, sandhill crane, scud, semipalmated plover, semipalmated sandpiper, shortnose gar, smallmouth bass, smallmouth buffalo, smooth green snake, snapping turtle, sora, spatterdock, spiny softshell, spirogyra, spottail shiner, spotted sandpiper, spotted touch-me-not, stonecat, stonefly, straw-colored nutsedge, swamp milkweed, swamp sparrow, tadpole madtom, tiger salamander, toad bug, tree swallow, trout-perch, trumpeter swan, virile crayfish, volvox, walleye, water boatman, water flea, water hemlock, water horehound, water milfoil, water mites, water pepper, water scavenger beetle, water scorpion, water smartweed, water strider, watermeal, western chorus frog, western painted turtle, western ribbon snake, white bass, white crappie, white sucker, whirligig beetle, wild millet, winged loosestrife, wood duck, yellow bass, yellow bullhead, yellow-crowned night-heron, yellow-headed blackbird, yellow perch, yellow warbler

# **Locations in Iowa**

lowa's glacial lakes and marshes are located mostly in north-central and northwest Iowa in the Des Moines Lobe which extends from Des Moines to Minnesota and encompasses 29 north-central and northwestern counties. Marshes also may be located in flood plains of prairie streams or depressions on the landscape in other areas of the state.

**Bibliography**Iowa Department of Natural Resources. 2001. *Biodiversity* of Iowa: Aquatic Habitats CD-ROM.